

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1-20 (canceled)

21. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein the detachable part is rotated by applying a momentum of electromagnetic field forces thereto.

22. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped; and

stabilizing an angular position of the detachable part by rotation thereof; mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein the detachable part is rotated by applying a momentum heat expansion forces of fuel combustion products thereto.

23. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein the detachable part is rotated by transferring thereto at least a portion of kinetic rotation energy of at least a part of the object to be gripped.

24. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein the detachable part is rotated by applying a fuel combustion product emission force thereto.

25. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein the detachable part is rotated before the moment of its detachment from the object to be gripped.

26. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein at least a portion of the retaining force is generated by applying an aerostatic force to the detachable part.

27. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein at least a portion of the retaining force is generated by applying a fuel combustion product emission force to at least one detachable part.

28. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein at least one retaining aerodynamic force is generated by rotating the detachable part.

29. (new) A method as claimed in claim 28, wherein the detachable part is rotated by means of the step selected from the group consisting of: applying a momentum of electromagnetic field forces, applying a momentum of heat expansion forces of fuel combustion products, transferring at least a portion of kinetic rotation energy of at least a part of the object to be gripped, applying a fuel combustion product emission force.

30. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein an angular velocity of rotation of the rotating part of the object to be gripped is reduced after mechanical engagement of the rotating detachable part of the object to be gripped by a part of the gripping object.

31. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein a rotating detachable part of the object to be gripped is oriented relative to the object to be gripped by applying an orienting aerodynamic force to the rotating detachable part of the object to be gripped.

32. (new) A method for gripping an object, comprising:

detaching a part of an object to be gripped while maintaining a mechanical link therewith;

retaining the detachable part at a distance from the object to be gripped by means of a retaining force directed at an angle to a longitudinal axis of the object to be gripped;

stabilizing an angular position of the detachable part by rotation thereof; and

mechanically engaging the detachable part by a part of a gripping object through the spatial movement of the gripping object,

wherein a rotating detachable part of the object to be gripped is oriented relative to the object to be gripped by applying an orienting aerostatic force to the rotating detachable part of the object to be gripped.